

ON THE GNAPHOSIDAE (ARACHNIDA, ARANEAE) OF THE CALIFORNIA CHANNEL ISLANDS

By coincidence, I recently received from separate sources a male and a female of the spider genus *Drassyllus*, each collected on the smallest of the California Channel Islands, Santa Barbara. Because the abundant and widespread western species *Drassyllus insularis* (Banks) is known from several other Channel Islands¹, it seemed likely that the Santa Barbara specimens would also belong to that species. As they proved instead to represent a hitherto undescribed form, I take the opportunity here to supplement a recent revision of the genus (Platnick and Shadab 1982) and also to summarize the known records of Channel Island Gnaphosidae.

As indicated below (Table 1), ten species have been collected on at least one of the eight main islands. Eight of these ten species occur also on the adjacent mainland, and most of them are widespread in California, if not all of western North America. The other two species, the new *Drassyllus* described below and *Zelotes cruz* Platnick and Shadab (1983), are (so far as known) Channel Island endemics. Both of these taxa belong to species groups that are speciose in California, but their sister species or groups have not yet been identified with precision, primarily because several species in each group are still known from only one sex.

I am indebted to F. G. Hochberg, W. R. Icenogle, S. E. Miller, M. J. Moody, and M. E. Thompson for sharing specimens and information, and to M. U. Shadab for work on illustrations. The format of the description and abbreviations of morphological terms follow those used in the revision.

Table 1.—Species of Gnaphosidae and the Channel Islands on which they have been collected.

| Species | Islands | | | | | | | |
|--|------------|------------|------------|---------|-------------|---------------|----------------|--------------|
| | San Miguel | Santa Rosa | Santa Cruz | Anacapa | San Nicolas | Santa Barbara | Santa Catalina | San Clemente |
| <i>Gnaphosa maritima</i> Platnick and Shadab | + | + | | | + | | + | |
| <i>Haplodrassus signifer</i> (C. L. Koch) | + | | | | + | | | |
| <i>Drassodes angulus</i> Platnick and Shadab | | | | + | | | | + |
| <i>Herpyllus propinquus</i> (Keyserling) | | | | | | | + | |
| <i>Nodocion voluntarius</i> (Chamberlin) | | | | + | | | | |
| <i>Sergiolus montanus</i> (Emerton) | + | | | | + | | | |
| <i>Drassyllus insularis</i> (Banks) | + | + | + | | + | | + | + |
| <i>Drassyllus barbus</i> Platnick | | | | | | + | | |
| <i>Zelotes cruz</i> Platnick and Shadab | | | + | + | | + | | |
| <i>Micaria utahna</i> Gertsch | | | | | | | + | |

¹ *Drassyllus insularis* was originally described from Guadalupe Island, off Baja California Norte, Mexico. The few females available from that island show slight epigynal differences from mainland and Channel Island females. If males can be collected on Guadalupe, they may show the species to be distinct from the widespread population, for which the name *D. irritans* (Chamberlin) would be available.

Drassyllus barbus, new species

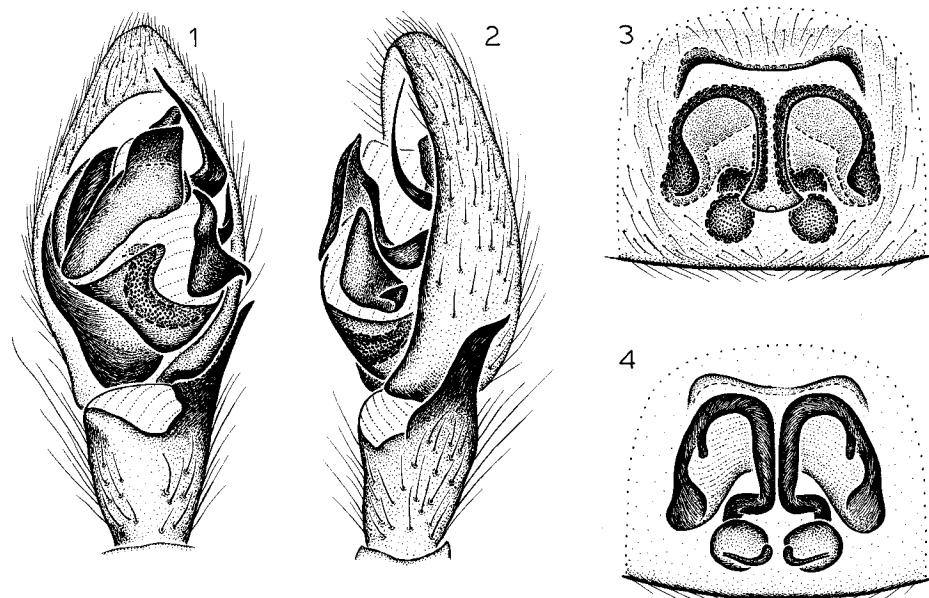
Figures 1-4

Types.—Female holotype collected under a rock on Santa Barbara Island, Santa Barbara County, California (28 March 1982; Martin Galindo-Ramirez), deposited in the American Museum of Natural History courtesy of Mr. Wendell R. Icenogle, and male paratype from the same locality (2-6 April 1979; Scott E. Miller), deposited in the Santa Barbara Museum of Natural History (catalogue number 33888).

Etymology.—The specific name is an arbitrary combination of letters.

Diagnosis.—Males of this species (a member of the *insularis* group) will be identified as *D. fractus* by users of the published key (Platnick and Shadab 1982:73) but can be distinguished from males of that species by the more prolaterally situated terminal apophysis and the narrower embolar projection (Figs. 1, 2). Females will key out to *D. coajus* but can be distinguished from females of that species by having a large flange connecting the anterior and median epigynal ducts (Figs. 3, 4). The only other taxon *D. barbus* is likely to be confused with is *D. ojus*, females of which have a similar epigynum but differ in having the lateral extensions of the midpiece further from the anterior epigynal margin, more strongly curved posterior epigynal ducts, and shorter anterior epigynal ducts.

Male.—Total length 4.18. Carapace 1.79 long, 1.31 wide. Femur II 1.22 long. Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.09, PLE 0.10; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.03, ALE-PLE 0.03. MOQ length 0.23, front width 0.16, back width 0.20. TAB with long retrolateral extension; TA prolaterally situated, rounded distally (Figs. 1, 2). Leg spination: femur IV p0-1-1; tibia III v2-2-2; metatarsi: I v0-0-0; III r1-2-2.



Figs. 1-4.—*Drassyllus barbus*, new species: 1, palp, ventral view; 2, palp, retrolateral view; 3, epigynum, ventral view; 4, epigynum, dorsal view.

Female.—Total length 5.49. Carapace 2.27 long, 1.99 wide. Femur II 1.51 long. Eye sizes and interdistances: AME 0.09, ALE 0.10, PME 0.12, PLE 0.11; AME-AME 0.04, AME-ALE 0.02, PME-PME 0.03, PME-PLE 0.05, ALE-PLE 0.07. MOQ length 0.31, front width 0.22, back width 0.27. AEM extending almost entire width of epigynum; AED extending to near SP (Figs. 3,4). Leg spination: femur IV p0-1-1, r0-11; tibia III v2-2-2; metatarsi: I v0-0-0; III v2-2-0, r1-2-2.

Material Examined.—Only the types.

Distribution.—Known only from Santa Barbara Island, California.

LITERATURE CITED

Platnick, N. I. and M. U. Shadab. 1982. A revision of the American spiders of the genus *Drassyllus* (Araneae, Gnaphosidae). *Bull. Amer. Mus. Nat. Hist.*, 173:1-97
Platnick, N. I. and M. U. Shadab. 1983. A revision of the American spiders of the genus *Zelotes* (Araneae, Gnaphosidae). *Ibid.*, 174:97-192.

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